Form MR-SMO (Revised July 25, 2012)

For Division Use Only	
Assigned File Number	SI 47 1 0063
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# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

1594 West North Temple Suite 1210 Box 145801 Salt Lake City, Utah 84114-5801

Telephone: (801) 538-5291 Fax: (801) 359-3940

COMPLETE APR 2 6 2016

DIV. OIL GAS & MINING

#### NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The information requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program (R647). The rules and Act are available online at <a href="http://www.rules.utah.gov/publicat/code/r647/r647.htm">http://www.rules.utah.gov/publicat/code/r647/r647.htm</a> and <a href="http

"Small Mining Operations" are operations which have a disturbed area of ten or fewer surface acres at any time in unincorporated areas, or five acres or fewer in incorporated areas.

	****	* * * * *
l.	<b>GENERAL INFORMATION</b> (Rule R647-3-	-104)
1.	Name of Mine: AMERICAN GILSONITE COMP	PANY NEAL STATE
2.A	. Name of Entity Applying for a Permit: Al	MERICAN GILSONITE COMPANY
	Contact (Authorized Officer): NICHOLAS LOT	T
	Mailing Address: 29550 SOUTH BONANZA HV	VY
	City, State, Zip: BONANZA, UT 84008	
	Phone: 435-789-1921	Fax: 435-781-4563
	E-mail Address: nlott@amgc.com	
	Entity is a: ✓ Corporation ☐ LLC	C Sole Proprietorship (dba) Individual ed) Other (specify type)
	Business Entity (not individuals) must be of Utah, Division of Corporations (DOC) www.commerce.utah.gov to renew or apply	
2.B	. Are you currently registered to do business Business Entity #: 73-131788	in the State of Utah?  Yes No
	Local Business License #: 2014443	(if required)
	Issued by: County: UINTAH COUNTY	
	Registered <u>Utah</u> Agent (as identified with the Name: <u>DOUGLAS MAUGHAN</u>	ne Utah DOC) (if individual leave blank):  Title: CHIEF FINANCIAL OFFICER
	Address: 29950 SOUTH BONANZA HWY	
	City, State, Zip: BONANZA, UT 84008	
	Phone: 435-781-4534	Fax: 435-781-4563
	E-mail Address: dmaughan@amgc.com	

2.C. Entity's Representative(s) (if different from #2A) authorized and designated to receive notices of violation, cessation orders, and all other notices to be given to the permittee or operator by the Division. DIV. OIL GAS & MINIM Address: 29950 SOUTH BONANZA HWY Name: NICHOLAS LOTT City, State, Zip: BONANZA, UT 84008
Phone: 435-781-4552 Fax: 435-781-4563 Emergency, Weekend, or Holiday Phone: E-mail Address: Name: \_\_\_\_\_ Title: \_\_\_\_\_ Address: City, State, Zip: Phone: \_\_\_\_\_ Fax: \_\_\_\_ Emergency, Weekend, or Holiday Phone: E-mail Address: 3a.. If Business is a Sole Proprietor (dba) or Individual: Name of Owner: \_\_\_\_\_ Title: \_\_\_\_\_ Business Address: City, State, Zip: Phone: \_\_\_\_\_ Fax: \_\_\_\_ E-mail Address: 3b. If Business is a Corporation: Name of Officers: DOUGLAS MAUGHAN Title: CHIEF FINANCIAL OFFICER Name: TED STEVENS Title: CHIEF EXECUTIVE OFFICER Name: \_\_\_\_\_ Title: \_\_\_\_ Name: \_\_\_\_\_ Title: Headquarters Address: 29950 SOUTH BONANZA HWY City, State, Zip: BONANZA, UT 84008 3c. If Business is a Limited Liability Company: Member Managed Manager Managed Name of 1<sup>st</sup> Member/Manager: \_\_\_\_\_\_ Title: \_\_\_\_\_ Business Address: \_\_\_\_\_ City, State, Zip: Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail Address: Name of 2<sup>nd</sup> Member/Manager: \_\_\_\_\_\_ Title: \_\_\_\_\_ Business Address: City, State, Zip: \_\_\_\_\_ Fax: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail Address: \_\_\_ 3d. If Business is a Partnership: Names of First Partner: Business Address: City, State, Zip: Phone: \_\_\_\_\_ Fax: \_\_\_\_ E-mail Address: Names of Second Partner: Business Address: City, State, Zip: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail Address:

5.	Ownership of Land Surface:		
	Private (Fee) Public Domain (BLM) National Forest (USFS) State Trust Land/School Sections State Sovereign Lands Other (please describe):		
	Name STTLA Address THS R24 & SEC. 32 SL STATE TEXST LANDISCHOLSET.		
	Name Address 675 E 500 S Suite 500		
	Name Address Shc. ut 84102		
	Name Address		
6.	Ownership of Minerals:		
	Private (Fee) Public Domain (BLM) National Forest (USFS)  State Trust Land/School Sections State Sovereign Lands Other (please describe):		
	Name 517 A Address THS R74E SEC 32 SL Name Address \$ 675 E 5005 Suite 500		
	Name Address SLC UT 84102		
	Name Address		
	BLM Lease or Project File Number(s) and/or USFS assigned Project Number(s)		
	BLM Claim Numbers N/A		
	Utah State Lease Number(s): ML 49730 OBA		
	Name of Lessee(s) ZIEGLER CHEMICAL + MINERAL CORP.		
7.	Have the above surface and mineral owners been notified in writing?  Yes No		
	If no, why not?		

Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration prior to commencing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 538-5508 for notification requirements.

8. Does the Entity have legal right to enter and conduct mining operations on the land covered by this notice? Yes \_\_\_\_\_ No\_\_\_\_\_

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III.

	\frac{\sqrt{N}}{2}, of \frac{\sqrt{NE}}{2}, of \frac{\sqrt{NE}}{2} = \frac{1}{4}, of \frac{\sqrt{SW}}{2} = \frac{1}{4}, Section: \frac{32}{2} = \frac{\sqrt{Township: 11S}}{24E} = \frac{24E}{24E} = \frac{1}{2} = \
	TM East:(if known) UTM North:(If known)  lame of Quad Map for Location: Archy Bench Quadrangle and Rainbow Quadrangle
If	the project within an incorporated area? () Yes (_x) No yes, what is the town or city?
la	ocation and Operations maps must be plotted at a scale to accurately identify locational andmarks and operations details. All maps must include a north arrow, scale, appropriate labels, and title box including the mine name, township, range and section.
a (1	The general location map must be the scale of a USGS 7.5 minute series map or equivalent "=2000") and identify new or existing access roads.
	. The <u>operations map</u> (1"=200' or other scale as determined necessary by the Division) must be abeled and identify:
	i. The area to be disturbed;
	<ul> <li>The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and</li> </ul>
	iii. Any adjacent previous disturbance for which the operator is not responsible.
	(Contact the Division for a list of consultants and land surveyors for mapping assistance.)
T	he proposed (5 acre or less) disturbed area (including access/haul roads) should be marked ON HE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers hould be appropriately spaced so that the next marker in either direction is clearly visible with the aked eye.
01	PERATION PLAN (Rule R647-3-106)
T	ype of mining: Surface () Underground ( x )
	lineral(s) to be mined: Gilsonite

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Div. of Oil, Gas & Mining

5.	Provide a brief <b>description of the proposed mining operation</b> , and onsite processing facilities (add extra pages if necessary). <u>See attached proposed mine plan.</u>					
	Drill Neal 2A – 9 dry holes measuring 2.75" in diameter which will be plugged.					
Drill Neal 7 - 9 dry holes measuring 2.75" in diameter which will be plugged.						
	Trenching on the Neal 2A will be up to 500' along the strike of the vein & 10' deep. Trenchin					
	on the Neal 7 will be up to 300' along the strike of the vein & 10' deep.					
6.	( ) <b>New Road(s)</b> : Length(ft), Width(ft)					
7.	7. (_X) Improved Road(s): Describe improvements that need to be made to existing roads to access the site, including the Length 340 _ (ft) and Width _12 (ft) of new disturbances.  Due to the grade of the terrain construction, this road will require very little cut and fill					
8.	Total project surface <b>acreage to be disturbed</b> : Neal 7 = 1.5 Neal 2A= 1, Neal 5=.89 (acres) PLEASE SPECIFY EXACT ACREAGE (this will be used to determine surety bond amount – see #VI).					
9. 10.	Proposed <b>startup date</b> (month, year): October 2011 Proposed <b>completion</b> , if known (month, year): December 2013					

#### IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at:: https://fs.ogm.utah.gov/pub/MINES/Coal Related/RecMan/Reclamation Manual.pdf.

- 1. Keep the mining operation in a safe, clean, and environmentally stable condition.
- 2 Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.
- 3. Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.
- Construct berms, fences, or barriers, when needed, above highwalls and excavations. 4.
- Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.
- 6. Remove all waste or debris from stream channels.
- 7.
- 8.
- Reclaim all roads that are not part of a permanent transportation system Reclaim and suitable overburden prior to mining. 9.
- 10. Stockpile topsoil and suitable overburden prior to mining.



#### VARIANCE REQUEST (Rule R647-3-110)

Any variance request must be approved in writing by the Division

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see IV. Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measure to be utilized. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

	N/A
Item#	Applicable Rule # (I.e. R647-3-109.10 (If you did not want trenches & pits reclaimed)
Justification: _	
Alternate metho	ods or measure to be utilized:
2 <sup>nd</sup> Variance Re	equested
	NIA
Item#	Applicable Rule #
Justification:	
Alternate metho	ods or measure to be utilized:
3 <sup>rd</sup> Variance Re	quested
	NA
Item#	Applicable Rule #
Justification: _	
Alternate metho	ods or measure to be utilized:

SURETY (Utah Code Ann. §40-8-7(1)[c])

A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §40-8-7(1)[c]).

The reclamation surety amount is based on the nature, extent and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based

upon acceptable Costs Index. Contact the Division for the dollar amount require a three (3) or five (5) year period for this project.					
I have provided or will pro- Certificate of Deposit Other		Surety Bond	■ Cash (certifie y) undecided	ed funds)	
Form MR-SMO 03132007				Page 6	1 11 11

#### VII. SIGNATURE REQUIREMENT

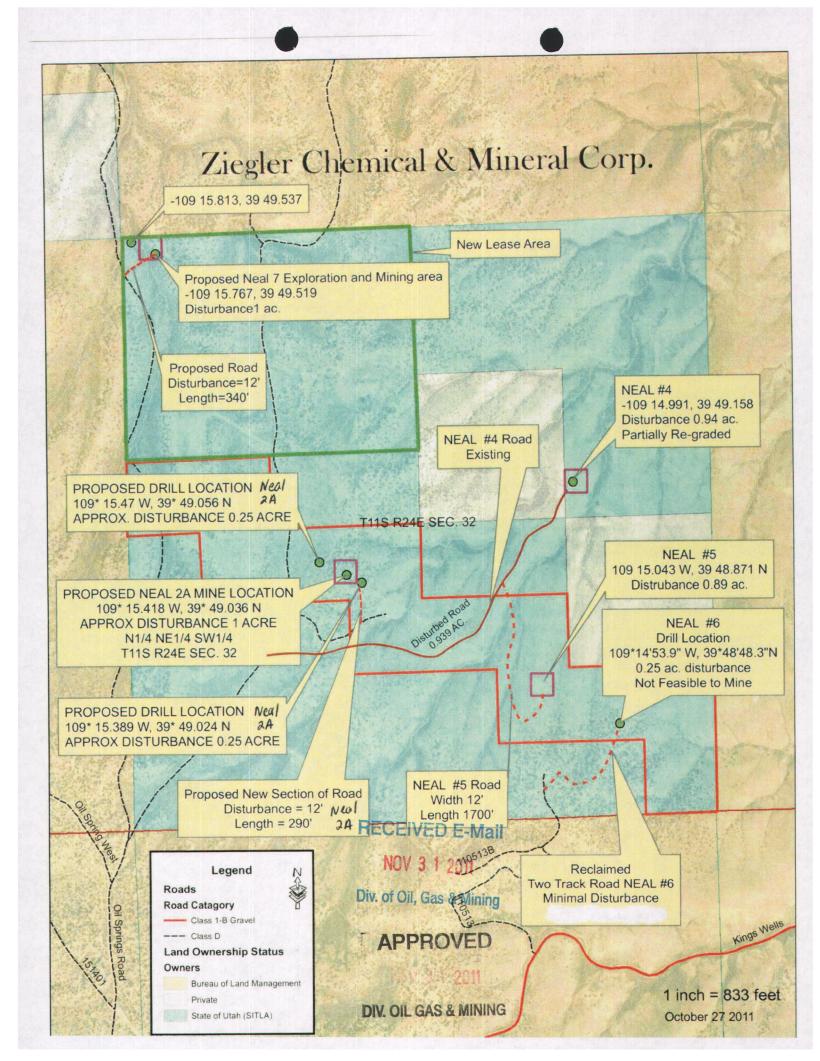
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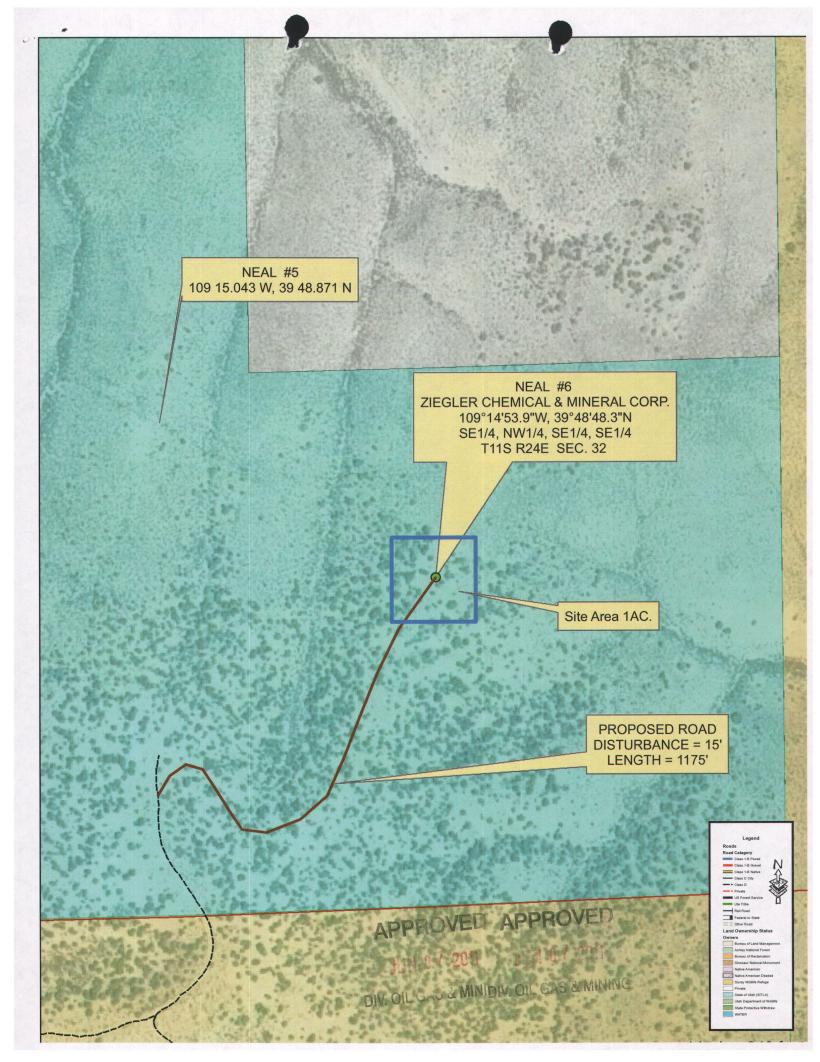
#### CERTIFICATION

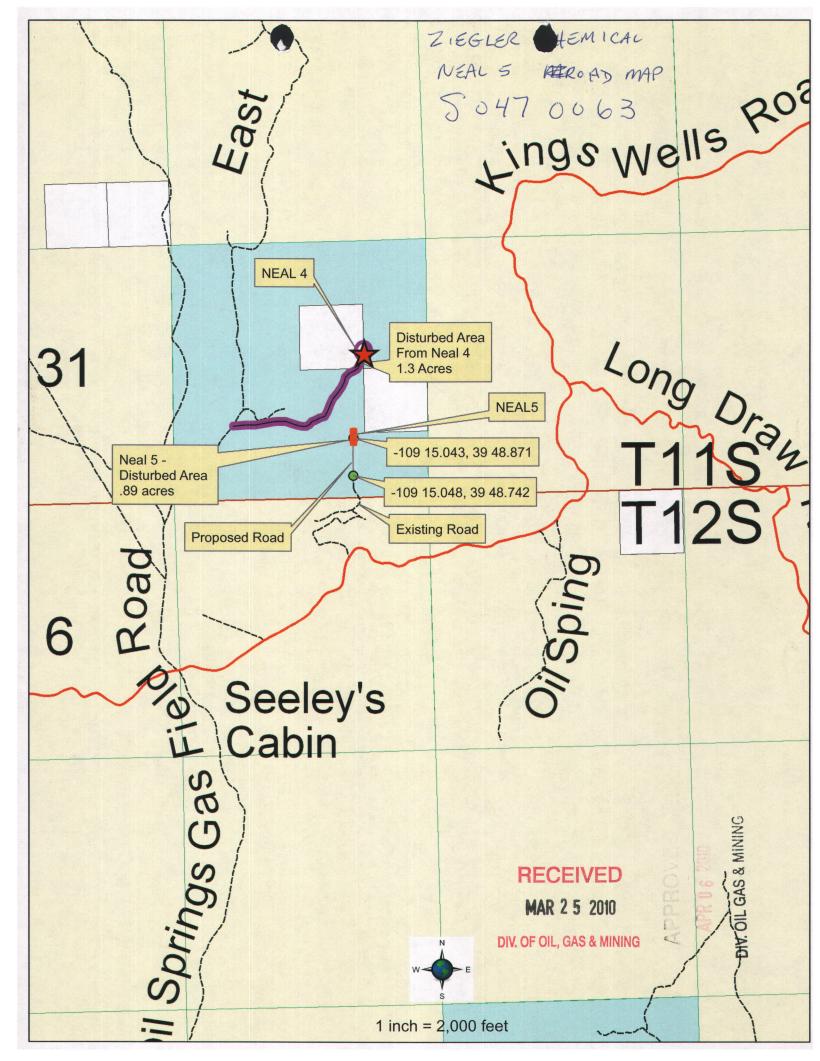
I state under penalty of perjury under the laws of the state of Utah and the United States of American G that:

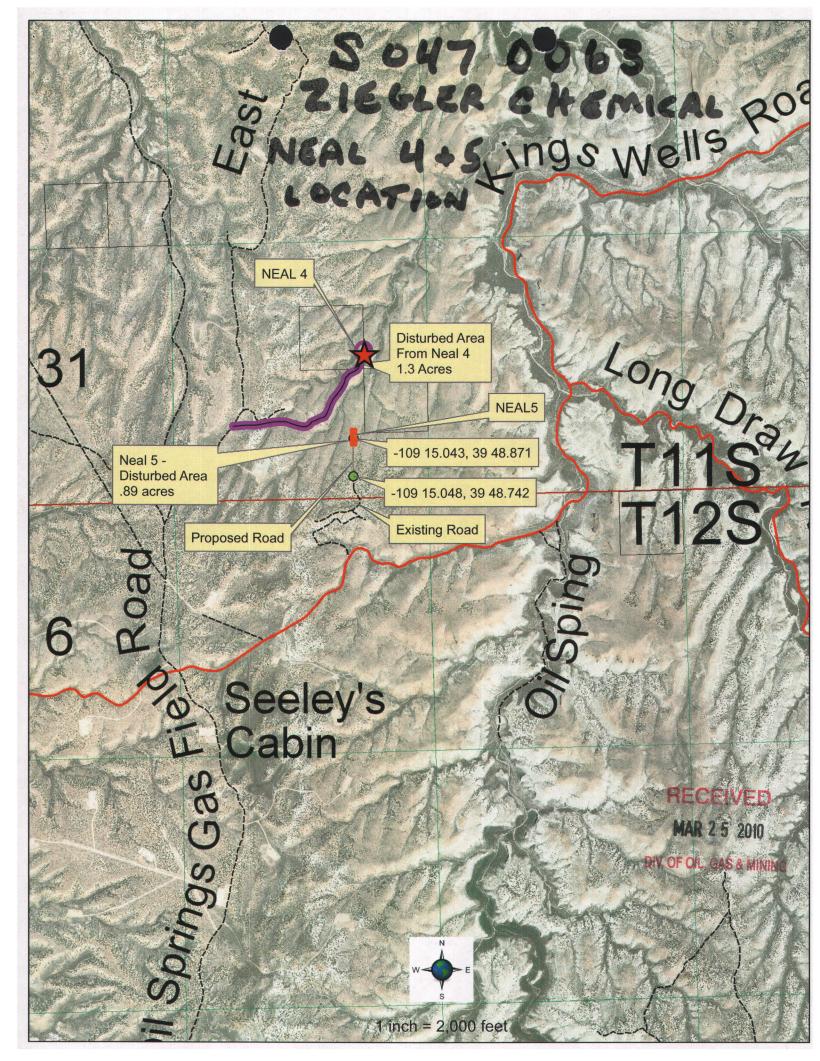
- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. This certification must be signed by: (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; or (4.) the member or manager if applicant is a limited liability company.

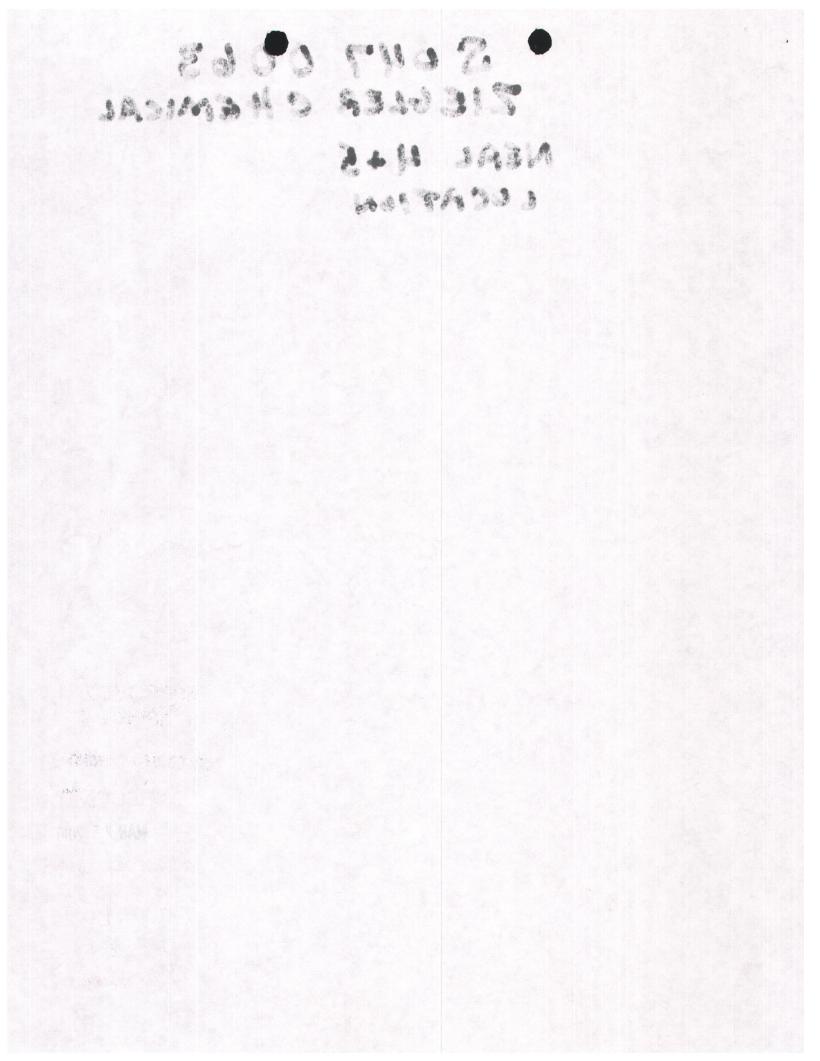
Signature:	Date: _///3//8-	
Name (typed or printed): Douglas Maughan		
Title/Position (if applicable): Chief Financial Officer		

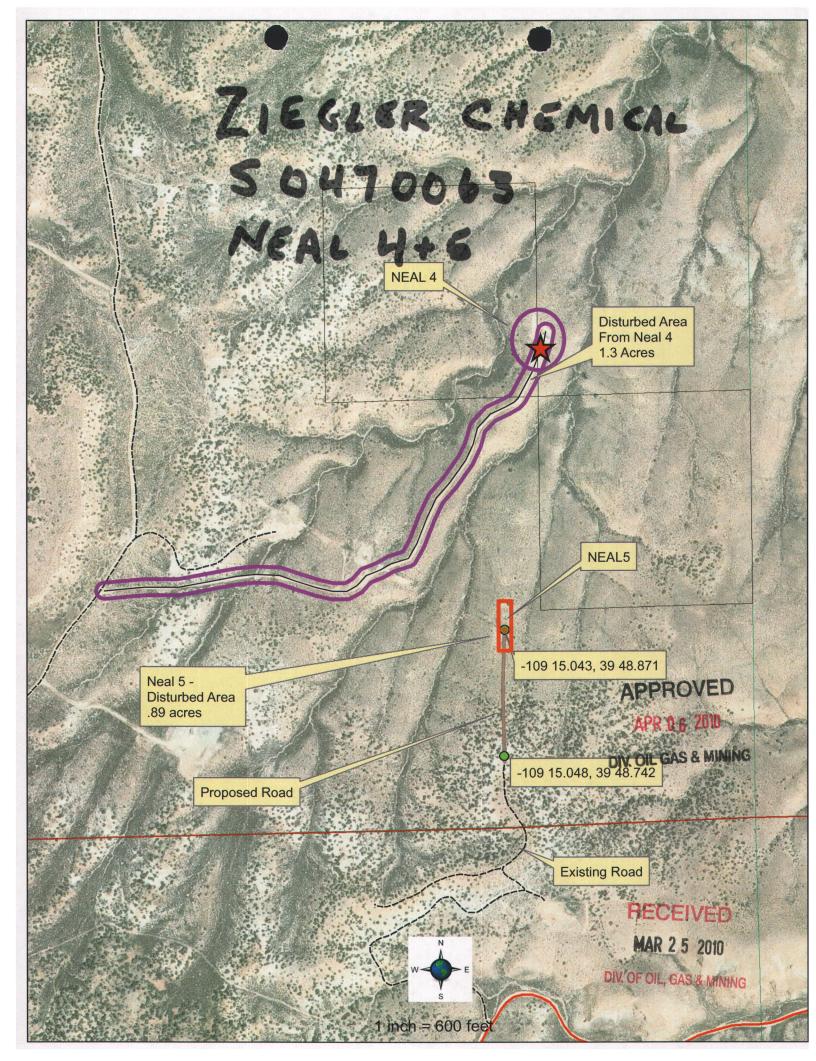












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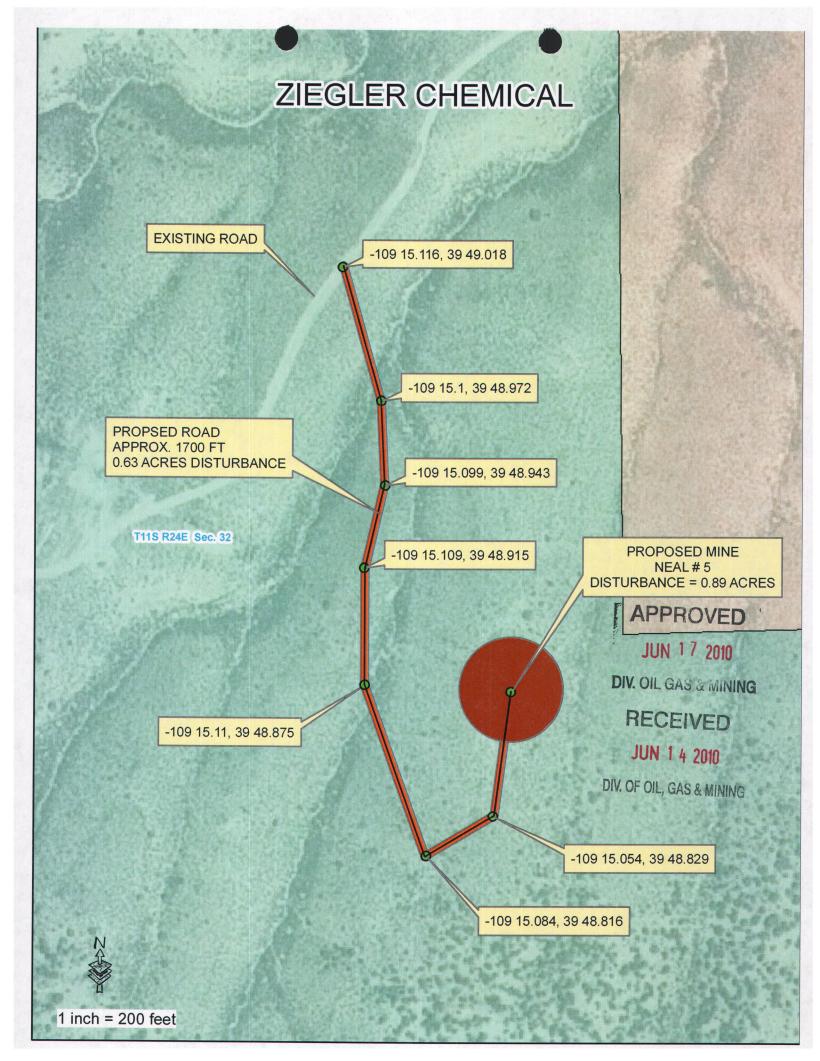
MOIMBER CHEMICAL

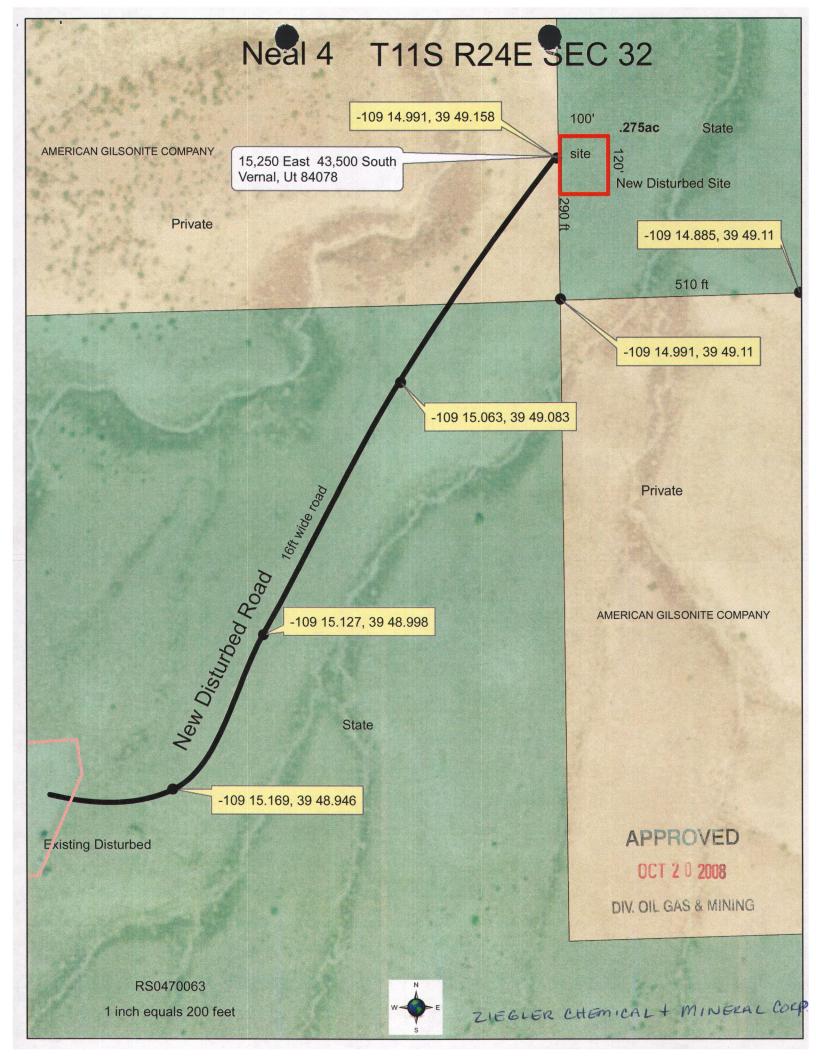
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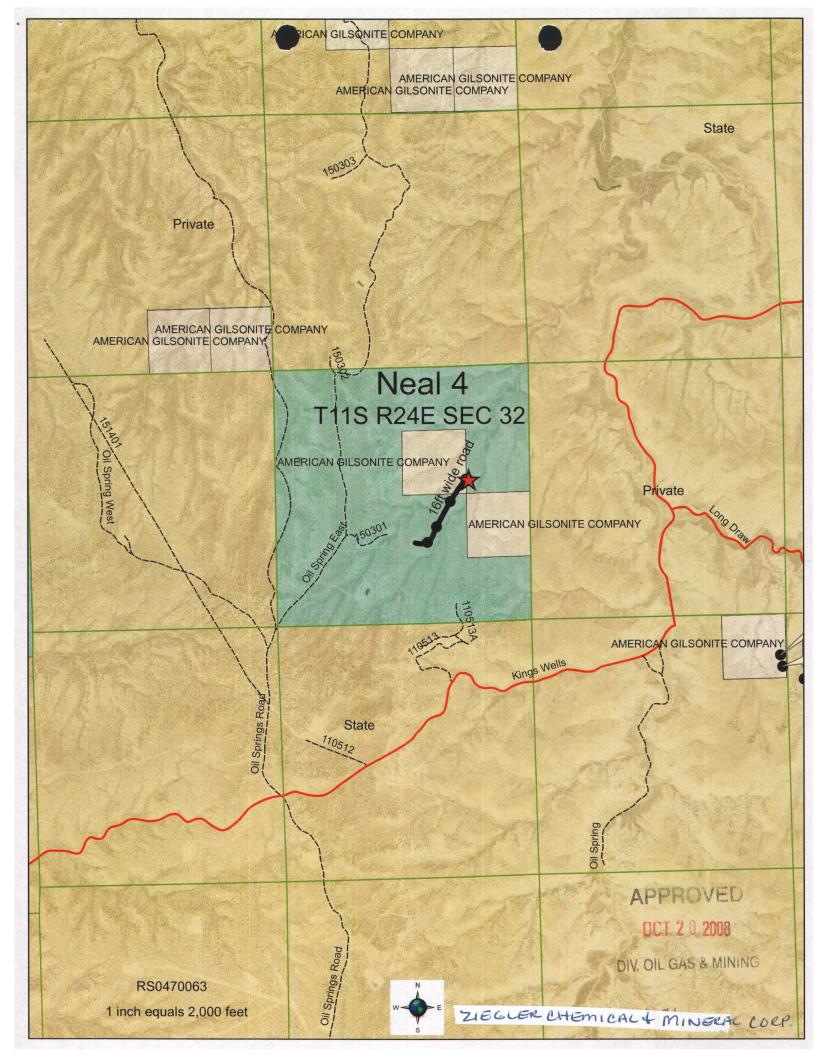
AFRE HAGA

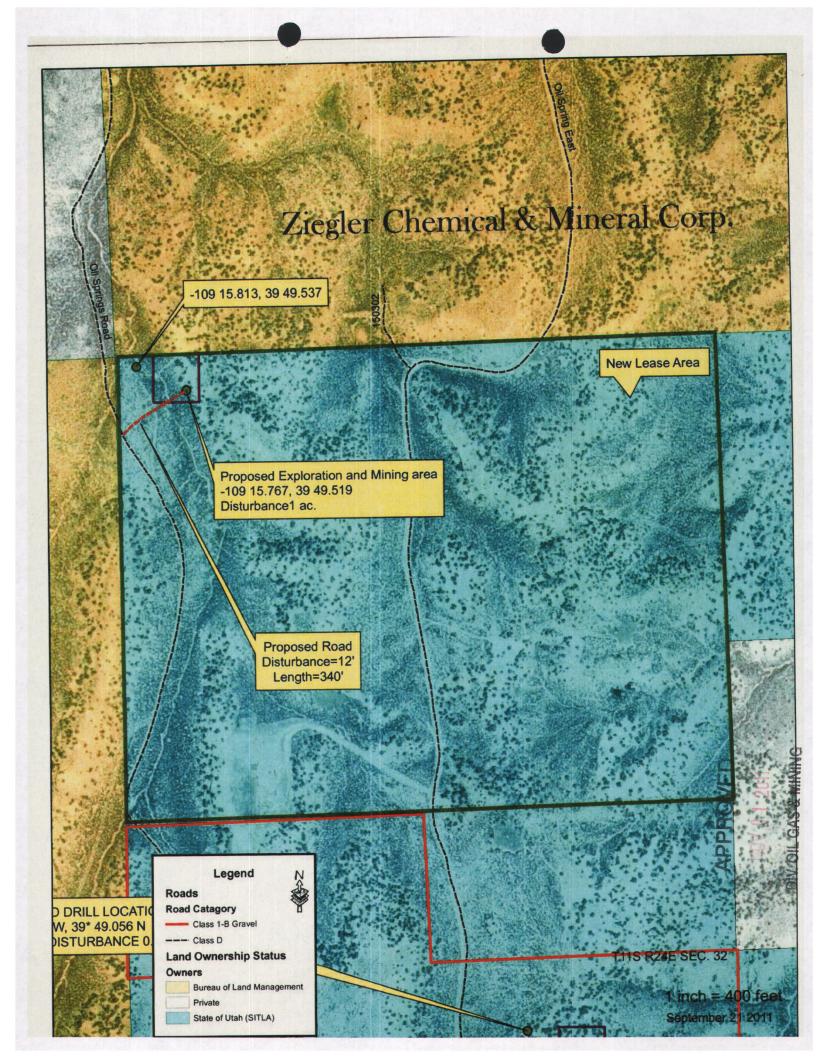
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Neal 7 Mine Plan

September 26, 2011

Ziegler Chemical & Mineral Corp. Propose to remove Gilsonite from the Neal 7 Mine located in Section 32, T11S R24E.

In order to supply the quality and quantity of Gilsonite requested by our customers, ZCMC would like to re-commence mining operations immediately upon approval of this mine plan.

Neal 7 will be approximately 3/4 of a mile northwest from the present mine opening of Neal 5. An ore bin and airlift system will be installed at the mine shaft to remove ore from the mine. ZCMC will place a derrick and hoist for the raising and lowering of men and materials.

The normal workforce would include two underground miners, one hoist man at the surface and on occasion one timber man. If demand increases more crews will be put in place to meet our customer's needs. The ore mined will reach the surface in an ore bin, from which it will be loaded into covered trucks and transported to ZCMC facilities at Little Bonanza.

The new road will be approximately 340 feet long by 12 feet wide. Due to the grade of the terrain construction, this road will require very little cut & fill. In addition, an area 150 feet by 300 feet will be leveled by cut and fill at the location of the Neal 7 hoist house and compressor shed. The total new disturbed area will be about 1.5 acres including the road.

A portal will be built at the entrance of the Neal 7 mine to facilitate entry and exit of men and equipment. At the Neal 7 mine, a concrete collar approximately 18x 4 feet will be constructed at the surface to stabilize the shaft opening. All openings in the ground (shafts and escape ways) would be fenced with chain link.

**APPROVED** 

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All enclosures would have gates with locks to provide a first line of security. Sufficient area inside the fenced area would be maintained for ingress and egress. The gates would be locked when the mine is not in operation. Signs will be placed in order to warn the public of mining operations.

A number of facilities other than the opening for the mine shaft and escape ways would be located on the surface, including:

- A hoist house and head frame to raise and lower the conveyance in the shaft at Neal 7.
- A 25-30 ton ore bin for the storage and loading of Gilsonite will be located on each mine site.
- A dust collector will be placed on the top of each storage bin to remove dust from the airlift system.
- Airlift fans will be installed on pad next to each head frame. These fans are designed to lift ore to the surface through a 12-inch pipe in the utility shaft.
- A compressor shed, for the diesel-powered compressor.
- Electricity to supply power to the hoists, compressor and fans would be provided by a diesel generator.

Top soil from disturbed areas would be stored in piles in the immediate vicinity of the area from which it will be removed. The topsoil pile will be seeded to stabilize it for future reclamation use.

A small waste rock pile. It is anticipated that very little waste rock would be produced. Only the Gilsonite would be extracted from the vein.

No water would be used in the mining operation. Any underground water encountered will be handled in accordance with federal water regulations and requirements.

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Three Ansul 20-pound fire extinguishers would be on hand: two in the hoist house, and one by the compressor. All rules and regulations regarding fire prevention would be strictly adhered to. If a fire grows so large that is cannot be controlled with fire Extinguishers, Deseret Generation and Transmissions fire crew will be called to assist in fighting the fire. Uintah County/Vernal City will also be called as back up. If an under ground fire occurs, the mine would be sealed. In order to prevent an underground fire, the following precautions will be taken:

- All combustible materials including vegetation will be kept away from mine openings;
- Fire retardant paint will be put on all timber used in mine openings;
- No electrical equipment will be used underground
- Smoking and smoking materials will be prohibited underground.
- There will not be any explosives stored at the mine site.

Miners will be instructed to maintain a clean camp and to report any unusual activities that could be detrimental and/or unlawful. In order to minimize impacts to the environment from personnel involved in mining activities, employees would be subject to the following regulations:

- No open fires of any kind except in approved buildings in approved stoves or furnaces
- · No illegal harassing or shooting of wildlife.
- No trash left in any unauthorized place.
- No unnecessary off-road driving.
- No collecting of plants.

For safety and mine efficiency, mobile telephone communications will be maintained between the mine and the Ziegler office in Little Bonanza.

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All garbage and solid wastes (other than wasted rock) will be placed in covered 55 gallon cans then taken to a dumpster, located on ZCMC property. A toilet will be located at the mine site for use by ZCMC personnel. A 10 foot deep pit will be dug underneath the toilet facility to accommodate sewage, which will be allowed to decompose in -situ.

When the mineshafts and escape ways are ready for closure, final designs would be submitted to the Division before seal construction. The collar and other structures will be removed. The mine openings will be sealed with 18 inch thick concrete reinforced with rebar placed on 12 inch centers. If the seal is to be in an exposed rock outcrop, the top of the seal will be constructed to conform to the contour of the outcrop and will be no higher than the adjacent rock. The bottom of the seal would be placed on bedrock. If the seal is location where soil would cover the seal, the bottom of the seal will be placed on bedrock and covered with a minimum of 4 feet of topsoil.

Upon completion of mine operations, all machinery, equipment and debris would be removed from the site. The site would be graded to conform as closely as possible to pre-mining conditions. The reclaimed area will be scarified, and re-vegetated with a seed mixture approved by D.O.G.M.

Ritchie Anderson

Mine Superintendent

**APPROVED** 

NOV 0 1 2011



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#### Neal 2A Mine Plan

Ziegler Chemical & Mineral Corp. Propose to remove Gilsonite from the Neal 2A Mine located in Section 32, T11S R24E.

In order to supply the quality and quantity of Gilsonite requested by our customers, ZCMC would like to re-commence mining operations immediately upon approval of this mine plan.

Neal 2A will be approximately 1900 feet west from the present mine opening of Neal 5. An ore bin and airlift system will be installed at the mine shaft to remove ore from the mine. ZCMC will place a derrick and hoist for the raising and lowering of men and materials.

The normal workforce would include two underground miners, one hoist man at the surface and on occasion one timber man. If demand increases more crews will be put in place to meet our customer's needs. The ore mined will reach the surface in an ore bin, from which it will be loaded into covered trucks and transported to ZCMC facilities at Little Bonanza.

The new road will be approximately 290 feet long by 12 feet wide. Due to the grade of the terrain construction, this road will require very little cut & fill. In addition, an area 150 feet by 300 feet will be leveled by cut and fill at the location of the Neal 2A hoist house and compressor shed. The total new disturbed area will be about 1.5 acres including the road.

A portal will be built at the entrance of the Neal 2A mine to facilitate entry and exit of men and equipment. At the Neal 2A mine, a concrete collar approximately 18x 4 feet will be constructed at the surface to stabilize the shaft opening. All openings in the ground (shafts and escape ways) would be fenced with chain link.

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All enclosures would have gates with locks to provide a first line of security. Sufficient area inside the fenced area would be maintained for ingress and egress. The gates would be locked when the mine is not in operation. Signs will be placed in order to warn the public of mining operations.

A number of facilities other than the opening for the mine shaft and escape ways would be located on the surface, including:

- A hoist house and head frame to raise and lower the conveyance in the shaft at Neal 2A.
- A 25-30 ton ore bin for the storage and loading of Gilsonite will be located on each mine site.
- A dust collector will be placed on the top of each storage bin to remove dust from the airlift system.
- Airlift fans will be installed on pad next to each head frame. These fans are designed to lift ore to the surface through a 12-inch pipe in the utility shaft.
- A compressor shed, for the diesel-powered compressor.
- Electricity to supply power to the hoists, compressor and fans would be provided by a diesel generator.

Top soil from disturbed areas would be stored in piles in the immediate vicinity of the area from which it will be removed. The topsoil pile will be seeded to stabilize it for future reclamation use.

A small waste rock pile. It is anticipated that very little waste rock would be produced. Only the Gilsonite would be extracted from the vein.

No water would be used in the mining operation. Any underground water encountered will be handled in accordance with federal water regulations and requirements.

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- All combustible materials including vegetation will be kept away from mine openings;
- Fire retardant paint will be put on all timber used in mine openings;
- No electrical equipment will be used underground
- Smoking and smoking materials will be prohibited underground.
- There will not be any explosives stored at the mine site.

Miners will be instructed to maintain a clean camp and to report any unusual activities that could be detrimental and/or unlawful. In order to minimize impacts to the environment from personnel involved in mining activities, employees would be subject to the following regulations:

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- No unnecessary off-road driving.
- No collecting of plants.

For safety and mine efficiency, mobile telephone communications will be maintained between the mine and the Ziegler office in Little Bonanza.

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JUN 27 2011



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Ritchie Anderson

Mine Superintendent

**APPROVED** 

JUN 27 2011



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Ziegler Chemical & Mineral Corp. Propose to remove Gilsonite from the Neal # 5 Mine located in

In order to supply the quality and quantity of Gilsonite requested by our customers, ZCMC would like to re-commence mining operations immediately upon approval of this mine plan.

Approximately 893 feet from the present mine opening to the southeast of the Neal #3 mine location an escape route 138 feet from the main shaft will be built along the strike of the vein. An ore bin and airlift system will be installed at the mine shaft to remove ore from the mine. ZCMC will place a derrick and hoist for the raising and lowering of men and materials.

The normal workforce would include two underground miners, one hoist man at the surface and on occasion one timber man. If demand increases more crews will be put in place to meet our customer's needs. The ore mined will reach the surface in an ore bin, from which it will be loaded into covered trucks and transported to ZCMC facilities at Little Bonanza.

The new road will be approximately 700 feet long by 16 feet wide. Due to the grade of the terrain construction of this road will require cut and fill. In addition, an area 120 feet by 100 feet will be leveled by cut and fill at the location of the Neal #5 hoist house and compressor shed. The total new disturbed area will be about .89 acres.

A portal will be built at the entrance of the Neal #5 mine to facilitate entry and exit of men and equipment. At the Neal #5 mine, a concrete collar approximately 18x 4 feet will be constructed at the surface to stabilize the shaft opening. All openings in the ground (shafts and escape ways) would be fenced with chain link.

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All enclosures would have gates with locks to provide a first line of security. Sufficient area inside the fenced area would be maintained for ingress and egress. The gates would be locked when the mine is not in operation. Signs will be placed in order to warn the public of mining operations.

A number of facilities other than the opening for the mine shaft and escape ways would be located on the surface, including:

- A hoist house and head frame to raise and lower the conveyance in the shaft at Neal #5.
- A 25-30 ton ore bin for the storage and loading of Gilsonite will be located on each mine site.
- A dust collector will be placed on the top of each storage bin to remove dust from the airlift system.
- Airlift fans will be installed on pad next to each head frame. These fans are designed to lift ore to the surface through a 12-inch pipe in the utility shaft.
- A compressor shed, for the diesel-powered compressor.
- Electricity to supply power to the hoists, compressor and fans would be provided by a diesel generator.

Top soil from disturbed areas would be stored in piles in the immediate vicinity of the area from which it will be removed. The topsoil pile will be seeded to stabilize it for future reclamation use.

A small waste rock pile. It is anticipated that very little waste rock would be produced. Only the Gilsonite would be extracted from the vein.

No water would be used in the mining operation. Any underground water encountered will be handled in accordance with federal water regulations and requirements.

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Three Ansul 20-pound fire extinguishers would be on hand: two in the hoist house, and one by the compressor. All rules and regulations regarding fire prevention would be strictly adhered to. If a fire grows so large that is cannot be controlled with fire Extinguishers, Deseret Generation and Transmissions fire crew will be called to assist in fighting the fire. Uintah County/Vernal City will also be called as back up. If an under ground fire occurs, the mine would be sealed. In order to prevent an underground fire, the following precautions will be taken:

- All combustible materials including vegetation will be kept away from mine openings;
- Fire retardant paint will be put on all timber used in mine openings;
- No electrical equipment will be used underground
- Smoking and smoking materials will be prohibited underground.
- There will not be any explosives stored at the mine site.

Miners will be instructed to maintain a clean camp and to report any unusual activities that could be detrimental and/or unlawful. In order to minimize impacts to the environment from personnel involved in mining activities, employees would be subject to the following regulations:

- No open fires of any kind except in approved buildings in approved stoves or furnaces
- No illegal harassing or shooting of wildlife.
- No trash left in any unauthorized place.
- No unnecessary off-road driving.
- No collecting of plants.

For safety and mine efficiency, mobile telephone communications will be maintained between the mine and the Ziegler office in Little Bonanza.

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All garbage and solid wastes (other than wasted rock) will be placed in covered 55 gallon cans then taken to a dumpster, located on ZCMC property. A toilet will be located at the mine site for use by ZCMC personnel. A 10 foot deep pit will be dug underneath the toilet facility to accommodate sewage, which will be allowed to decompose in -situ.

When the mineshafts and escape ways are ready for closure, final designs would be submitted to the Division before seal construction. The collar and other structures will be removed. The mine openings will be sealed with 18 inch thick concrete reinforced with rebar placed on 12 inch centers. If the seal is to be in an exposed rock outcrop, the top of the seal will be constructed to conform to the contour of the outcrop and will be no higher than the adjacent rock. The bottom of the seal would be placed on bedrock. If the seal is location where soil would cover the seal, the bottom of the seal will be placed on bedrock and covered with a minimum of 4 feet of topsoil.

Upon completion of mine operations, all machinery, equipment and debris would be removed from the site. The site would be graded to conform as closely as possible to pre-mining conditions. The reclaimed area will be scarified, and re-vegetated with a seed mixture approved by D.O.G.M.

**Bob Davis** 

Mine Superintendent

Ziegler Chemical & Mineral Corp proposes to remove Gilsonite from two (2) mines located in ML-49730 OBA. This lease is located in Section 32, T11S, R24E in Uintah County, Utah. The lease includes the following described lands:

The Neal #3 mine is located in the N ½ SW ¼ NW ¼ SE ¼ of section 32, and the Neal #4 mine will be located in the SW ½ SE ¼ NE ¼ of section 32. The Neal #4 will be located approximately 1800 feet to the northeast of the Neal #3.

In order to supply the quality and quantity of Gilsonite requested by our customers, ZCMC would like to re-commence mining operations immediately upon approval of this mine plan.

Approximately 1800 feet from the present mine opening to the northeast the Neal #4 mine location will be built to provide for an escape route 300 feet from the main shaft along the strike of the vein. An ore bin and airlift system will be installed at the mine shaft to remove ore from the mine. ZCMC will place a derrick and hoist for the raising and lowering of men and materials.

The normal workforce would include two underground miners, one hoist man at the surface and on occasion one timber man. If demand increases more crews will be put in place to meet our customer's needs. The ore mined will reach the surface in an ore bin, from which it will be loaded into covered trucks and transported to ZCMC facilities at Little Bonanza.

The new road will be approximately 1800 feet long by 16 feet wide. Due to the grade of the terrain construction of this road will require cut and fill. In addition, an area 120 feet by 100 feet will be leveled by cut and fill at the location of the Neal #4 hoist house and compressor shed. The total new disturbed area will be about .93 acres.

A portal will be built at the entrance of the Neal #4 mine to facilitate entry and exit of men and equipment. At the Neal #4 mine, a concrete collar approximately 18 x 4 feet will be constructed at the surface to stabilize the shaft opening. All openings in the ground (shafts and escape ways) would be fenced with chain link fencing. All enclosures

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would have gates with locks to provide a first line of security. Sufficient area inside the fenced area would be maintained for ingress and egress. The gates would be locked when the mine is not in operation. Signs will be placed in order to warn the public of mining operations.

A number of facilities other than the opening for the mine shaft and escape ways would be located on the surface, including:

- A hoist house and head frame to raise and lower the conveyance in the shaft at Neal #4.
- A 25-30 ton ore bin for the storage and loading of Gilsonite will be located on each mine site.
- A dust collector will be placed on the top of each storage bin to remove dust from the airlift system.
- Airlift fans will be installed on pad next to each head frame. These fans are designed to lift ore to the surface through a 12-inch pipe in the utility shaft.
- A compressor shed, for the diesel-powered compressor.
- Electricity to supply power to the hoists, compressor and fans would be provided by a diesel generator.

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A small waste rock pile. It is anticipated that very little waste rock would be produced. Only the Gilsonite would be extracted from the vein.

No water would be used in the mining operation. Any underground water encountered will be handled in accordance with federal water regulations and requirements.

Three Ansul 20-pound fire extinguishers would be on hand: two in the hoist house, and one by the compressor. All rules and regulations regarding fire prevention would be strictly adhered to. If a fire grows so large that is cannot be controlled with fire Extinguishers, Deseret Generation and Transmissions fire crew will be called to assist in fighting the fire. Uintah County/Vernal City will also be called as back up. If an under ground fire occurs, the mine would be sealed. In order to prevent and underground fire, the following precautions will be taken:

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**Bob Davis** 

Mine Superintendent

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